

AVIATION

The Oldest American Aeronautical Magazine

MAY 25, 1925

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Philadelphia looking Northwest

VOLUME
XVIII

SPECIAL FEATURES

NUMBER:
21

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MAY 25, 1925

AVIATION

VOL. XVIII, NO. 21

Published every Monday

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VOL. XXVIII

MAY 25, 1925

No. 21

Fostering Development

In a recent study of the interdependence of naval aviation and a landy, the following statements were made: "The Navy has undertaken the design, for the construction of an aircraft engine has placed this matter in the hands of the aircraft engine industry of the country with a view to developing that industry for management. The Navy has made funds for the development of new types of engines and has placed its wide experience in operating engines for the first point of new types and the refinement of present types."

The Navy and the Navy have divided the various uses of engines into three. The engines now in use in both services were designed and built by civilian concerns. That policy in giving the industry free rein, is sound, has been borne out by its results. The United States leads the world today in aircraft engine development. We have engines ranging from 100 to 1,000 horsepower. These engines have enabled us to capture most of the world's records. Those that have been won away from us will probably be brought back by our engines now in production or design.

The policy is in direct contrast with the general policy of the government departments in the development of aircraft. The development of aircraft has certainly not been "placed in the hands of the industry."

The Army Air Service has come to its present unfortunate position largely because it has tried to control too much with small production and not have freedom on competitive bids of aircraft produced by the industry. Lately there has been a great change and the development of aircraft has been turned over to the manufacturers.

The Navy still clings to its own designs and close supervision. In fact, the aircraft industry might almost be said to be a subsidiary of the Navy. The tendency, however, is to give the manufacturer their opportunity to demonstrate his engineering skill.

The varying policies of the two services is only another of the questions that some more definite action is required on national aeronautical progress.

Airways

There is a gradually growing recognition even among the most timid public that more than airplanes are needed to build up air traffic. Those who have viewed the development of aerial transportation both here and abroad, realize that the necessities have been so great in general aviation as to have been in the aeronautical qualities of the nation over. If this is true for day flying over land water it is even truer for night flying over mountains and seas. It will become evident to those who have had the privilege of watching through the AT&T camera and studying the reports of emergency fields and between which have been

instilled by the Air Mail. For night flying, the lighted airway is at the present time just as much a right of way as that owned by a railroad. Unless there is a great development in the navigation and reliability of planes, no company can hope to compete on the New York-Chicago run unless it uses the Air Mail route or makes a very large investment in developing another route.

A national policy covering airways will have to be made. Three methods present themselves. The first would create a complete government monopoly with the government owning the airways. Another would provide for the selling or leasing of the franchise for exclusive use of a lighted airway to a private company. A third would provide for the maintenance of the airway by the government with free use by individuals or companies. It is the latter solution which seems the most practical, but there is much to be said for the other plans. It is obvious that in the beginning there will not be enough traffic to support the cost of maintaining several airways over a great route. At first either government or private monopoly of the airway will be necessary if the economic of means is to be obtained. Later, when traffic becomes heavy, competition will follow naturally, as it has on river or ocean routes.

The New York-Chicago night airway will be the first test of a problem which has real national importance. Decisions are to be made which may have a very direct bearing on the future of air transportation in this country. It is fortunate that there is a change of the Air Mail has a keen sense of the relationship between national aeronautical development and the future of national aviation.

Safety First

There is a general view that commercial aircraft can be transformed almost overnight into military types of transport and bombers will probably become less true as commercial types become more standardized.

The differentiation will probably come more in the direction of safety, comfort and convenience, three qualities that military aircraft need not possess. The tendency toward the passenger carrying airplane that will not go into a spin is well pronounced. It is a safe position that in five years as commercial type of airplane that is used for carrying passengers will be considered strictly if it has not inherent aerodynamic qualities which prevent now down after striking. This too probably has the same of most of the fatalistic feeling from aerodynamic defects.

Ahead, there is a decided trend toward "safety first." The planes of the Imperial Airways have been severely criticized for their aerodynamic deficiencies.

It is not too early to give this new development consideration. The new very soon come when regulatory laws will concentrate the designing of machines that can be stalled without danger.

UNITED STATES AIR FORCES

U. S. ARMY AIR SERVICE

Logan Field Cross-Country

On May 30, eight of the planes of the 29th Division Air Service will take off for a 250 air cross-country trip over the Eastern States. Each plane will have a crew of one officer and one enlisted man. The pilot of plane No. 1 will be given the following order: "At 5:00 you will leave Logan Field and land at _____, which. You will receive further orders when you arrive." The orders will read just as a new trip, all on schedule time allowing for a 15 min. interval to return and get off. The same scheme will be carried on and five days on the Eastern States will be varied. Plane No. 2 will leave Logan Field under similar orders 15 min. after No. 1 and so on, until eight planes are under way, all following the same routine but not knowing where this course will lead them.

Each team must keep to schedule time. It must get off at its time and land on time. The team which comes second to the established schedule was first prize, the third, second and so on. Here are the prizes which the 29th Division Air Service offers.

Prize	Officer	Enlisted Men
First	\$350	\$150
Second	250	100
Third	150	50

An officer to be eligible must have his correspondence course finished by May 30. The eight pilots will be chosen on the basis of their past performances. This includes, attendance record, devotion to duty, flying efficiency and the general character of his work. As he indicated, the first team comes in three weeks by May 30. The eight men to enter the contest as aviators will then be chosen on the basis of their record in the squadron. Attendance will count heavily.

New Airplane Detectors

Work orders have been issued by the War Department to Frankford Arsenal for the manufacture before June 3 of airplanes out of a new type of sound-hunting device intended for detection of aircraft at considerable distances.

The order is in connection with the army program for extensive sound target firing this summer in aerial targets to get accurate information as to the effectiveness of radio search guns of all types. The test group is already in progress at points in New York State and will be conducted also at San Francisco, Honolulu and the Panama Canal Zone.

The new sound-hunting device is known as the "hypersonic horn," and preliminary experiments indicate that it will have a range of eight miles in distance. Present existing devices are inadequately styled "soundwaves" which require a different principle for spotting the distant number of aircraft motion. The new device is expected to have greater accuracy as well as greater range than the present equipment.

Miller Field Meet

The Second Annual Aviation Meet of the 29th Division Air Service, New York National Guard will be held on Saturday, June 30, 1935, at Miller Field, New York, State Island, N. Y. The meet will be open to all aviators and U. S. Air Service pilots. The preliminary list of events follows:

1. Performance Flight. 1st and 2nd Prizes—Silver cups to winning formations.
2. Stagger Race. 30 m. 1st, First—Gold Watch—2nd Prize Silver Certificate Case.

3. Landing to a Mark. Throttle closed at 500 ft. 1st Place, 2 trials. 1st Prize Gold Watch, 2nd Prize, Silver Certificate Case.
4. Airfield Race (Open). 1st Prize, Gold watch, 2nd Prize, Silver Certificate Case.
5. Climb between airplanes and tanks. (Demonstration.)
6. Aerial Course. (Demonstration.)
7. Ditch Speed Race. (30 m.) 1st Prize, Gold Watch 2nd Prize, Silver Certificate Case.
8. Sky Writing. (Demonstration.)
9. Stagger Race. Speed Race. (30 m.) 1st Prize, Gold Watch 2nd Prize, Silver Certificate Case.
10. Stunt Flying. 1st Prize, Gold Watch 2nd Prize, Silver Certificate Case.
11. Open Round Race (30 m.) 1st Prize, Gold Watch, 2nd Prize, Silver Certificate Case.
12. Relay Race. Mixed Team. (30 m.) 1st place, 1st Prize, 2nd Place, Gold Watch, 2nd Prize, Silver Certificate Case.
13. Parachute Jumping. 1st Prize, Gold Watch 2nd Prize, Silver Certificate Case.
14. On to Miller Field. 1st Prize, Silver Cup to representative showing greatest number of planes. 1st Prize, Silver Cup to Field flying greatest distance.

Note: If third prize is to be given that will be noted in formal announcement of events which will accompany every item. Events to start promptly at 11:30 a. m., and to finish at 9:30 p. m.

Army Air Orders

- May, Carl Spota, A. S., Langley Field, to Washington.
First Lt. Clarence B. Loban, A. S., Mass. Inst. Tech., Cambridge, to Henson Field.
First Lt. Aron S. Alton, A. S., Washington, to temporary duty Kelly Field, upon its completion to San Francisco, Calif. No. 30 for the Philippine Islands.
First Lt. Stephen H. Ford, A. S., Dayton to Chaney Field.
First Lt. August H. Fink, A. S., Dayton to Brooks Field.
First Lie. Lewis R. P. Howe and Edwin E. Page and So. Lt. Donald B. Phillips, A. S., A. S. Eng. School, Dayton, to Eng. School.
First Lie. George E. Haden, A. S., O. C. C. A. S., to A. S. Test. Sch., Langley Field, for instruction.
May, Harold S. Martin, A. S., Chicago, to McCook Field.
First Lt. Clarence C. Collier, A. S., designated as assistant A. S. Adv. Fly Sch., Kelly Field.
Van Lee, C. J. James E. Fisher, A. S., now transfer pending assignment to Ch. A. S. released from duty as assistant A. S. Adv. Fly Sch., Kelly Field.
Staff Sergeant R. E. Blevins, 11th Inf. Co. headquarters, A. S., Brooks Field, transferred to 60th Reg. Squad, A. S., Brooks Field.
Staff Sergeant Robert E. Boushacker, 60th Reg. Squad, A. S., Kelly Field, transferred to 11th Inf. Co. headquarters, A. S., Brooks Field.

U. S. NAVAL AVIATION

Midshipmen to be Aviators

Following the decision of Secretary of the Navy William D. Ford to effect at the United States Academy the recommendations of Jan. 27, 1935 of the Special Board on Aviation to make aviators a major subject there, practical steps are being taken to begin at once preparations for carrying out the order that was issued. Level B. B. Halsey, U. S. N., on duty in the Bureau of Aeronautics, left for Annapolis, Maryland, and the head of the department on the practical question of the new plan. Extension of the present sys-

tem of subjects already being taught at the Academy to admit a complete "ground course" will be planned while awaiting Halsey's return at Annapolis.

In the first year course at the Naval Academy the U. S. N. A. S. Department of the Navy will 1935 it has been decided to the study of subjects which are directly essential to the training of military aviators. With the exception of the actual operation of airplanes, the subjects to be taught in the first year will be divided into two groups: one in the sciences on which aviation is based this is given in any other school in the United States which trains pilots in flight. Subjects vital to the training of competent aviators, such as meteorology, astronomy, navigation, pilot ship handling, radio, communications, engineering and aerodynamics are taught at the Naval Academy during the first year. Physical development, so necessary a part of the preparation, is kept separate in the study of sports, midshipmen, and probably a larger percentage of them are physically qualified for aviation duties will be given the Naval Academy than in any other institution in the country.

An institute in one form or another has been taught in the Department of Oceanography, Ordnance and Geography, Navigation, Marine Engineering and Naval Construction, Marine Engineering and Physics in the Department of the same department, a total of 131 in the first year of the study of the theory of flight, to make, both general radio and naval radio, and to all subjects under the science of physics and to be essential to the training of military aviators. And, these new fundamental units, directly and indirectly, revealed in the study of atmosphere and lifting gases, spin and balance, pressure in fluids and pressure in any medium to serve in the study of the theory of flight, to make, both general radio and naval radio, and to all subjects under the science of physics and to be essential to the training of military aviators. And, these new fundamental units, directly and indirectly, revealed in the study of atmosphere and lifting gases, spin and balance, pressure in fluids and pressure in any medium to serve in the study of the theory of flight, to make, both general radio and naval radio, and to all subjects under the science of physics and to be essential to the training of military aviators.

In the Department of Marine Engineering and Naval Construction studies and practical drills are given for a total of 131 in the first year of the study of the theory of flight, to make, both general radio and naval radio, and to all subjects under the science of physics and to be essential to the training of military aviators. And, these new fundamental units, directly and indirectly, revealed in the study of atmosphere and lifting gases, spin and balance, pressure in fluids and pressure in any medium to serve in the study of the theory of flight, to make, both general radio and naval radio, and to all subjects under the science of physics and to be essential to the training of military aviators. And, these new fundamental units, directly and indirectly, revealed in the study of atmosphere and lifting gases, spin and balance, pressure in fluids and pressure in any medium to serve in the study of the theory of flight, to make, both general radio and naval radio, and to all subjects under the science of physics and to be essential to the training of military aviators.

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meeting and Aeronautics and of the Department of Research and Development, the entire program in progress, having on aviation, will be handled in scope, and the entire subject of aviation instruction will be established on one of first importance.

With the added theoretical instruction in aviation will graduate the new plan, adding practical experience in ground work and the principle of flying, both during the academic year and the three summer months of intensive instruction to meet of the first class.

Physical development which will necessarily prevent some graduates from flying will be the only one to eventually qualify all junior officers as either pilots or observers after final qualifying course at each training center at Pensacola and San Diego.

Big Shipmen Files

The Los Angeles, under command of Capt. George W. Steele, took off at 11:30 May 15, the object of the trip being to visit the members of the Admiralty Board to visualize the possibilities of the new aircraft carrier, the big shipmen was flown within a few hundred feet of the ground, the passengers were moving comfortably on unobstructed seats in the cabin. The start was made in a rapid rain. The passengers were light occupants and soon as the rain around the windows of their cabins were open.

Orlando McNamee of the States WEAF broadcast a description of the flight, and returned to radio interviews several of the passengers on board. Some of them were brief talks, expressing their satisfaction over the voyage.

The Los Angeles carried a crew of twenty-eight officers and men, and the shipmen was flown within a few hundred feet of the ground, the passengers were moving comfortably on unobstructed seats in the cabin. The start was made in a rapid rain. The passengers were light occupants and soon as the rain around the windows of their cabins were open.

The starting race was in the ground riding early at 6:30 p. m.

New Naval Boushars

The Navy Department has shipped a personnel of development in new and additional types of boarding planes for use on the aircraft carriers, new under construction, the U. S. Navy and U. S. Navy, and the crew for which has been provided and the crew for which has been provided.

Bids have been received for a single aircraft plane to be built around the "P-3000 engine." The details of this plane are confidential. If an award is made on these bids, the plane will be assembled at the Naval Aircraft Factory, Philadelphia.

These bids will be followed by requests for bids for a two-engine plane to be built around the Wright "Cyclone" surrounded by the engine, mounted and tested in a flight from Patterson, N. J., to Washington.

Experiments with these two planes are expected to go far in developing the new type of planes for the carriers and not until this design is made, will plans for the carriers be built in quantity.

Naval Air Orders

1. William D. Thomas det. command Nav. A. S., Annapolis, to Aircraft Squads, Kelly Field.
2. Capt. Jack K. Campbell det. Nav. A. S., San Diego, to U. S. B. Corp.
3. Gen. William C. Carr det. Nav. A. S., San Diego, to U. S. B. Corp.

1. Capt. Charles T. Stacey det. Nav. A. S., N. O. R. Hampton Road, to 1st Air Depot.
2. Capt. Eugene L. Manges det. U. S. B. Marine to temp duty Nav. A. S., Pensacola.

1. Capt. Albert C. Wetherhead det. U. S. B. Colorado to temp duty Nav. A. S., Pensacola.
2. Capt. Robert H. Roberts, det. U. S. B. Utah to temp duty Nav. A. S., Pensacola.

1. Capt. Richard W. Wagoner det. U. S. B. Police to temp duty Nav. A. S., Pensacola.
2. Capt. Ralph H. Howard det. Nav. A. S., Annapolis to Nav. A. S., Pensacola.
3. Capt. Vernon C. Chapp det. Nav. A. S., Pensacola, to U. S. B. West Virginia.



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